

Soujanya Poria

Associate Professor · Nanyang Technological University

School of Electrical and Electronic Engineering
Courtesy appointment, College of Computing and Data Science
Founder and Director, DeCLaRe Lab

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55,026 citations · h-index 90 · i10-index 199

Google Scholar · 30 October 2026

Research focus

Memory for AI agents, efficient and reliable multi-agent systems, and reasoning. Broader interests include multimodal and embodied AI, and the safety and trustworthiness of language models.

Appointments

2025–present	Nanyang Technological University Associate Professor with tenure, School of Electrical and Electronic Engineering (since August 2025). Courtesy appointment, College of Computing and Data Science (since 15 October 2026).
2019–present	Founder and Director, DeCLaRe Lab Deep Cognition and Language Research. Established at SUTD in 2019; based at NTU since 2025.
Apr–Jul 2025	Singapore University of Technology and Design Associate Professor with tenure.
2024–2025	Singapore University of Technology and Design Provost's Chair Assistant Professor, July 2024–March 2025.
2019–2024	Singapore University of Technology and Design Assistant Professor, ISTD; Deputy Director, AI Mega Center.
2019–2022	Institute of High Performance Computing, A*STAR Joint appointment with SUTD.
2018–2019	Nanyang Technological University Presidential Postdoctoral Fellow, September 2018–August 2019.
May–Sep 2018	A*AI, A*STAR Research Fellow II.
2017–2018	Nanyang Technological University Research Fellow, July 2017–April 2018.

Education

2014–2017	PhD in Computer Science and Mathematics University of Stirling, UK. Supervisor: Amir Hussain. Thesis: Novel symbolic and machine-learning approaches for text-based and multimodal sentiment analysis.
2009–2013	BE in Computer Science and Engineering Jadavpur University, India.

Teaching

Nanyang Technological University

IE4422 · Multimodal Large Language Models — Theory & Applications AY2026/27, Semester 1. Co-instructor; lectures and project assessment.

IE4791 · Database Systems AY2025/26, Semester 2. Co-instructor; second-half lectures and tutorials.

IE2108 · Data Structures & Algorithms in Python AY2025/26, Semester 2. Tutorial instructor.

CC0007 · Science and Technology for Humanity AY2025/26 and AY2026/27, Semester 1. Tutorial instructor.

Singapore University of Technology and Design

Computational Data Science (2019–2024); Information Retrieval (2021, 2023, 2024); Capstone (2020, 2023, 2024).

Developed 50.045 Information Retrieval in 2021; revised it in 2023 to incorporate large language models.

Honours and awards

2026	Highly Cited Researcher, Web of Science
2024	IEEE CIS Outstanding Early Career Award
2024	Social Impact Award, NAACL
2024	SCALE-LLM Best Paper Award
2023	President's Young Scientist Award, Singapore
2023	MIT Technology Review 35 Innovators Under 35 Asia Pacific
2022	IEEE Intelligent Systems 10 to Watch in AI
2022–present	Stanford's Top 2% Scientists
2023–2024	AI2000 Most Influential Scholar Honorable Mention, AMiner
2021	ACM ICMI Outstanding Paper Award
2021	IEEE Computational Intelligence Magazine Outstanding Paper Award
2018	Presidential Postdoctoral Fellowship, NTU

Professional service

Conference leadership

2027	Program Co-Chair, EMNLP
2027	Demonstration Track Co-Chair, ACL

Senior Area Chair and Area Chair, 2019–present. Recurring service across ACL, EMNLP, NAACL and related NLP venues. Selected appointments: Senior Area Chair at ACL and EMNLP from 2026, ACL 2024 (NLP Applications) and EMNLP 2023 (Commonsense Reasoning); Area Chair at ACL and EMNLP 2020, EMNLP 2019 and NAACL 2019.

Conference reviewing. Regular reviewer for ICLR, NeurIPS, AACL and other AI and NLP conferences. Senior Program Committee: AACL and IJCAI 2019.

Editorial service

2020–present	Associate Editor, Neurocomputing; Cognitive Computation
2019–present	Associate Editor, Information Fusion
2023–2025	Associate Editor, IEEE Transactions on Big Data
2020–2022	Associate Editor, SN Computer Science

Guest editing: Cognitive Computation, Information Processing & Management and IEEE Computational Intelligence Magazine (2019).

Journal reviewing includes IEEE Transactions on Affective Computing, IEEE Transactions on Neural Networks and Learning Systems, Information Fusion, Knowledge-Based Systems, Expert Systems with Applications and Natural Language Engineering.

Senior Member, IEEE · Member, ACL

University service

2026–present	Member, EEE Standing School Search Committee, NTU Faculty recruitment.
2026–present	Member, EEE GPU Centre Committee, NTU
2025	Academic mentor, School of Electrical and Electronic Engineering, NTU Mentoring incoming undergraduate students.

Research funding

Active projects

2026–2029	Embodied AI for Human-Robot Collaborative Task Execution Principal Investigator (NTU); CNRS@CREATE / NRF. S\$10M consortium funding; S\$3.33M DeCLaRe allocation.
2026–2028	Toward Generalist Vision Language Action Models Principal Investigator (NTU); KLASS. S\$1.5M agreement value, including licensing and indirect costs.
Apr 2025–Mar 2028	LLM with Linear Transformers Co-Principal Investigator; AI Singapore. S\$4.99M.
Jan 2024–Dec 2026	Trustworthy and Responsible LLMs for Singapore Governance Principal Investigator; AI Singapore. S\$500K.
Dec 2023–Dec 2026	Detecting, Measuring and Mitigating Hallucinations in LLMs Principal Investigator; DSO. S\$600K.
2026	Google DeepMind GCP Grant Google DeepMind. S\$100K.

Completed projects

Jun 2024–Dec 2025	Walled AI Principal Investigator; MoE GAP. S\$245.7K.
Oct 2021–Oct 2024	CSK-NLP: Leveraging Commonsense Knowledge for NLP Principal Investigator; Ministry of Education. S\$736.812K.
Feb 2020–Feb 2023	K-EMERGE Principal Investigator; AME Research Grant. S\$910K.
Feb 2020–Feb 2022	Intent Inference Principal Investigator; DSO Research Grant. S\$800K.
Jul 2021–Jun 2024	ESTATE-IQ Co-Principal Investigator; Housing Development Board. S\$4.44064M.
Feb 2020–Jan 2021	AI for Hate Speech Detection on Social Media Principal Investigator; DSO Research Grant. S\$100K.
Feb 2020–Jan 2023	THRUST 2: Discovery by AI Co-Principal Investigator; SGPAI. S\$260.252K.
May 2018–May 2020	Multimodal Emotion Recognition in Dialogues Principal Investigator; Adobe-e Research Corporate Funding. S\$10K per quarter.

Corporate and in-kind support

Dec 2024	Alibaba Research Support Principal Investigator; Alibaba. S\$100K.
Jun 2024	Microsoft In-Kind Support Principal Investigator; Microsoft. S\$56K.
May 2024	Oracle In-Kind Support Principal Investigator; Oracle. S\$41.3K.
May 2025	Google In-Kind Support Principal Investigator; Google. S\$6.805K.
May 2025	OpenAI Research Support Co-lead Principal Investigator; OpenAI. S\$238.237K.
May-Jun 2025	Meta Research and In-Kind Support Principal Investigator; Meta. S\$67K research funding and S\$56K in-kind support.

Research supervision

Current PhD students

Jingdi Lei NTU, August 2025–present. Main supervisor. LLMs and post-training; 2026 research internship at Tencent.

Keith Kwok NTU, August 2026–present. Main supervisor; co-supervisor: Renwen Zhang. AI safety and alignment; sycophancy, emotional manipulation, and parasocial attachment.

Hung Chia-Yu NTU, August 2025–present. Main supervisor. Multimodal generation, vision-language-action models, and world models; 2026 research internship at Meta Superintelligence Lab.

Nithish Selvaraj NTU, January 2026–present. Main supervisor. Multi-agent systems.

Liu Renhang NTU, January 2026–present. Main supervisor. Generative models and world modelling for robotics.

Varun Gumma NTU, August 2025–present. Main supervisor. LLMs, reinforcement learning, efficiency, reasoning, and modelling.

Vernon Toh NTU, August 2025–present. Main supervisor. Reasoning and prompt augmentation.

Richmond Sin NTU, January 2026–present. Main supervisor. Reasoning.

Peilin Feng NTU, 2026–present. Main supervisor. Multimodal understanding and agents.

Ruiwen Zhou NUS, August 2025–present. Co-supervisor with Min-Yen Kan. LLM reasoning and AI agents; 2026 research internship at MiniMax.

Tej Deep Pala NTU, August 2025–present. Main supervisor. LLM reasoning, reinforcement learning, and multi-agent systems.

Maojia Song SUTD, January 2024–present. Main supervisor; co-supervisor: Dorien Herremans. Adaptive intelligence, foundation agents, multimodal interaction, and embodied AI; 2026 research internship at Meta Superintelligence Lab.

PhD graduates

Deepanway Ghosal (2019–2024) SUTD. Now at Google DeepMind.

Hui Chen (2019–2023) SUTD. Now at NUS, as a Research Fellow.

Rishabh Bhardwaj (2020–2025) SUTD. Now at DeCLaRe Lab, as a Research Scientist.

Wei Han (2021–2025) SUTD. Now at Huawei.

Pengfei Hong (2021–2025) SUTD. Now at Tonghuashun.

Chia Yew Ken (2021–2025) SUTD. Supervised with Lidong Bing (Alibaba). Now at Balyasny Asset Management L.P.

Devamanyu Hazarika (2017–2021) National University of Singapore. Co-advisor with Roger Zimmermann. Now at Meta.

Research staff

Suorong Yang Research Scientist. data-centric AI, AI for Science, trustworthy AI, and reasoning models

Rishabh Bhardwaj Research Scientist. AI safety

Navonil Majumder Research Scientist. multimodal learning, dialogue, and generative AI

Visiting students

Zhixuan Wu current visiting student; PhD student at Beijing University of Posts and Telecommunications

Li Yingting Beijing University of Posts and Telecommunications; two A*-ranked first-author conference papers from the visit

Xiaocui Yang Northeastern University, China; two A*-ranked first-author conference papers from the visit

Qi Sun Nanjing University of Science and Technology; two A*-ranked conference papers and interdisciplinary public-health collaborations

Xianbing Zhao Harbin Institute of Technology; two A*-ranked conference submissions

Jing Wang Beijing University of Posts and Telecommunications; two journal submissions

Master's supervision**NTU cohort commencing August 2026**

Wang Qi Adaptive Agent Team Formation.

Chen Bowen Smart light-weight guardrails for agentic LLM harnesses.

Fang Xiaofei Adaptive Agent Architectures for Zero-Knowledge Tool Discovery.

Li Han Multimodal learning and reasoning.

Chen Hong Yi Subtask detection, consolidation and execution in long-term planning.

Fan Kai Understanding non-gradient learning-based continual learning in agentic systems.

Zuo Kaiwen Optimizing the Agent Loop Architecture for Autonomous LLMs.

Gupta Kingshuk Analyzing subliminal biases, abilities, and preferences transferred between models during distillation.

Mei Landi Generating CAD designs from text/image prompts.

Qin Shitong Improving memory and safety in long-term agentic interactions.

Su Tianyu Assessing and improving soundness evaluation of research ideas with LLM-judges.

Jing Tianyang Understanding and improving the safety of agentic systems against indirect prompt injection.

Qu Wenxi Understanding and reasoning about safety in Vision Language Action models.

Li Yehua Analyzing and improving reasoning efficiency with speculative decoding.

Ye Yicong Investigating what should be stored in Memory in Agentic Frameworks.

Liu Yilong Small Models as Specialist Agents.

Ren Yuao Improving token efficiency in agentic LLM harnesses.

Zheng Haowen Detecting and mitigating sycophancy in LLM assistants for research ideation.

Zuo Qian Quality Diversity Search for Research Idea Generation.

Zeng Fankai Memory Poisoning in LLM Agents.

Yu Xue Discovering race and gender biases in "empathetic" LLM-judges for moral dilemmas.

Li Pengyu Confidence-Aware Multi-Agent Debate.

Li Bingzhe Detecting and Removing Harmful Agents.

Chen Weihao Enhancing LLM Agent Resilience via Persistent Memory in Volatile Environments.

Liu Shimeng Isolating Pure Behavioral Reasoning through Semantic Obfuscation.

NTU graduates

Dong Yiwei MSc, 2026. Improving multimodal reasoning models.

Wu Fei MSc, 2026. Fine-tuning text-to-SQL LLMs for green manufacturing databases; co-supervised with A*STAR.

NTU cohort commencing January 2026

Sun Minghao Toward generalist vision-language-action models.

Tian Lin Touch-enabled VLA with action-conditioned world models.

Xie Lin Efficient co-reasoning with state-space models and LLMs.

Chen Changyu LLM overthinking.

Liu Jinhui Post-training for VLAs.

Huang Jingwei Efficient reasoning with parallel decoding and latent-space methods.

Feng Yixiang World models for VLA.

Wu Liuyi Inference-time adaptation of vision-language-action models.

NTU cohort commencing August 2025

Ang Yankang Creating small and smart embodied AI agents using world models.

Gan Jiaqi RAG for Sustainable Manufacturing.

Zheng Yuliang LLM-Powered Autonomous Agent for Net-Zero Manufacturing Workflows.

Tan Leixin LLM for Hypothesis Discovery.

Wang Guanxiao Plan to Retrieve: Reasoning based Deep Research Agents.

Earlier master's supervision

Shaozuo Zhang Master's student, SUTD, 2022–2025.

Joanna Saw Khai Sing STEP, SUTD; December 2019–September 2021

Abram Tan Jia Han STEP, SUTD; joined September 2024

Soh Jun Xian STEP, SUTD; January–December 2020

Ian Ng Zhi Yang STEP, SUTD; joined September 2024

Chew Lijie Bryan SHARP; joined January 2023

Sim Shang Hong SHARP, SUTD; joined January 2024. Now at Oumi AI.

Undergraduate supervision**NTU final-year projects • 2026 Semester 1**

Shunmugaraj Shanthana Priya AI-Powered Brain Tumor Detection and Classification from MRI Using Deep Learning.

Rachel Puah AI-Driven Vehicle Queue Length Estimation and Real-Time Congestion Monitoring for Smart Cities.

Lim Javier Deep Learning-Based Stock Price Forecasting Using Long Short-Term Memory (LSTM) Networks.

Jaslyn Lee Xin Pei Comparative Analysis of AI/ML and Traditional Image Processing Algorithms for Vehicle Detection and Tracking in Smart Transportation Systems.

Ang Yan Lin Edrea Breast Cancer Detection: Traditional Image Processing Versus AI-Based Diagnostic Models.

Mallemula Rithika AI-Driven Breast Cancer Detection Using Deep Learning and Transfer Learning.

Tan Xin Tao Isaac Brain Tumor Detection: A Comparative Study of Traditional Image Processing and AI-Based Methods.

Lim Hong Wei Vehicle Detection and Classification: A Comparative Study of Traditional Image Processing and AI/ML Techniques.

Jasmine Chan Ting Yu Fingerprint-Based Biometric Authentication Using Traditional and Deep Learning Techniques.

Siew Sze Zhe AI-Enhanced Face Recognition-Based Biometric Authentication System with Liveness Detection.

Goh Shannon Hybrid Machine Learning Framework for Enhanced Stock Price Prediction.

Low Zhao Li Ananda Sentiment-Driven Stock Market Prediction Using Artificial Intelligence.

Earlier undergraduate and UROP students

Sarang Nambiar; Aditi Kumaresan completed UROP students.

Shanshan Peng Apple; co-authored an EMNLP 2020 paper.

Jiankun Lu Apple; co-authored an EMNLP 2020 paper.

Pengfei Hong subsequently completed a PhD under my supervision; co-authored an EMNLP 2020 paper as an undergraduate.

Hung Chia-Yu co-authored an ACM MM 2024 paper; now a PhD student.

Tej Deep Pala now a PhD student.

Vernon Toh now a PhD student.

Thesis advisory and examination committees

NTU · Thesis Advisory Committees (2025–present). Huang Zihao; Guo Wenkai; Deng Haoyuan; Xue Yuquan; Zhang Haitian; Nguyen Duy Thai; Soumyaratna Debnath.

NTU · Thesis and oral examinations (2026). Lu Ye (internal thesis and oral examiner); Liu Tianyi and Hoe Jiun Tian (oral examination panels).

NTU · PhD qualifying examinations (2025–2026). Shan Ziyu; Zhang Haitian; Liu Lifeng; Sun Yuyao; Zhou Xiyuan; Syed Ariff Syed Hesham; Jayant Teotia.

SUTD · Thesis committees. Cheuk Kin Wai; Luo Yin-Jyun; Sun Xiaobing; Cheng Liying; Ha Thi Phuong Thao; Perry Lam Wee Hian; Nicholas Tay Yu Xiang; Jan Melechovsky; Wang Nian Yu Kyra; Hu Zhiqiang; Jia Shuyi. Thesis Examination Committee chair for Vishal Choudhary and Li Dongrui.

University of Technology Sydney · External PhD examiner (2026). Cheng Chen.

Former research staff and collaborators

Ambuj Mehrish Marie Skłodowska-Curie Postdoctoral Fellow, Ca' Foscari University of Venice.

Xiaocui Yang Assistant Professor, Northeastern University.

Henry Lim GovTech.

Qi Sun Alibaba.

Soumitra Sinhaajari Incoming Research Assistant, IISc, India.

Samson Yu PhD student, NUS.

Yi Xuan Tan Spoken language understanding.

Rima Hazra Assistant Professor, Institute for Advancing Intelligence, TCG CREST.

Armaan Puri Co-founder and CEO, FolkTalk.

Keynotes and invited talks

28 Oct 2026 **Beyond Better Actions: What Generalist Physical Agents Still Need**
Invited talk, IMDA Technical Sharing Session × AI Wednesdays, Lorong AI, Singapore.

6 Aug 2026 **Endowing Large Language Models with Efficient and Online Memory**
Keynote, International Conference on Future of AM, Singapore.

- 26 Jan 2026 **Where We Hit the Limits: Blue-Sky Directions for Large Language and Multimodal Models**
Keynote, Bodily Expressed Emotion Understanding (BEEU) Workshop, AAAI, Singapore.
- Dec 2025 **Where We Hit the Limits: Blue-Sky Directions for Large Language and Multimodal Models**
Invited talk, IndoML, BITS Pilani Hyderabad Campus, India.
- 27 Oct 2025 **10 Open Challenges Steering the Future of Vision-Language-Action Models**
Keynote, CogMAEC Workshop, ACM Multimedia, Dublin, Ireland (online presentation).
- 19 Sep 2025 **Embodied AI**
Keynote, A*STAR Centre for Frontier AI Research, Singapore.
- 17 Sep 2025 **10 Open Challenges Steering the Future of Vision-Language-Action Models**
Invited seminar, School of Computing and Information Systems / ResWORK, Singapore Management University.
- 2025 **Healthcare AI Masterclass**
Healthcare AI Symposium, A*STAR Institute of High Performance Computing, Singapore.
- 29 Apr 2025 **Embodied AI Workshop**
Invited speaker, National Robotics Programme, Singapore.
- Jan 2025 **Winter School on Deep Learning for Vision and Language Modelling**
Expert speaker, Indian Institute of Technology Guwahati, India.
- 27 Aug 2024 **Technical Sharing Session on AI Safety Practices**
Invited speaker, Infocomm Media Development Authority (IMDA), Singapore.
- 14 May 2024 **Understanding, Leveraging, and Improving Large Language Models**
Keynote, Multimodal Content Analysis for Social Good (MM4SG), The Web Conference, Singapore.
- 25 Mar 2023 **Multimodal Learning and Contextual Commonsense Reasoning for Conversational AI**
Invited talk, International Conference on Advances in IoT, Security with AI (ICAISA), University of Delhi, India.
- 2022 **New Avenues in Dialogue Systems**
Keynote, 10th SocialNLP Workshop, NAACL.

Earlier invited talks

- Invited talk, Emotion Recognition in Conversations, 2022, Microsoft Research, India.
- Guest lecture, Introduction to Deep Learning, 2021, AIDF, NUS, Singapore.
- Invited talk, Utterance-level Dialogue Understanding, 2021, ICON, India.
- Keynote talk, Utterance-level Dialogue Understanding, 2020, MICAI, Mexico.
- Keynote talk, on Emotion Recognition in Conversation: Research Challenges, Negative Results, and Benchmarks, 2020, SocialNLP, IJCAI, Macao.
- Invited talk, on the Role of Context in Natural Language Processing, 2019, University of Michigan, US.
- Invited talk, on Emotion Recognition in Conversation: Research Challenges, Negative Results, and Benchmarks, 2019, NUS, Singapore.
- Invited talk, on the Evolving Sentiment Analysis, 2019, NTU, Singapore.
- Invited talk, on Sentiment analysis for healthcare, 2018, MOHT, Singapore.
- Keynote Speaker, on Multimodal sentiment analysis, 2018, CICLing, Hanoi, Vietnam.
- Invited Talk, on the State of the art in Multimodal sentiment analysis, 2018, IIT Patna.

Selected research contributions and impact

DeCLaRe Lab models have more than 2 million downloads on Hugging Face. Code and datasets are available on GitHub.

Multimodal representation learning. TFN, MISA, **Multimodal-Infomax**. Tensor fusion, modality-invariant and modality-specific representations, and mutual-information-based fusion.

Dialogue understanding. DialogueRNN, DialogueGCN, MELD. Speaker- and context-aware emotion recognition, with a multimodal dataset of multi-party conversations.

Affective computing. MUSTARD. Multimodal sarcasm detection using language, visual and acoustic cues.

Audio generation and language models. Tango, Tango 2, TangoFlux. Text-to-audio generation through latent diffusion, preference alignment and flow matching.

Embodied AI. NORA. A compact, open-source vision-language-action model for robotic tasks.

Memory and efficient AI. δ -mem, EFLA. Online memory for language models and exact flow linear attention derived from continuous-time dynamics.

Entrepreneurship

Walled AI Co-founder and Non-Executive Director, 2024–present. Incubated at SUTD; backed by Iterative.

Selected media coverage and public engagement

VentureBeat. 21 May 2026. A 0.12% parameter add-on gives AI agents the working memory RAG can't.

The Straits Times. 30 July 2025. Singapore music-makers like Yung Raja and Jack Neo in tune with AI, but wary of its pitfalls.

Tabla. Updated 23 June 2025. SUTD AI specialist in MIT list of young innovators.

MarkTechPost. 31 December 2024. TangoFlux and CRPO for efficient, high-quality text-to-audio generation.

The Straits Times. 6 December 2023. Universities, reskilling courses key to tripling S'pore's AI workforce to 15,000: Experts.

Lianhe Zaobao. 4 December 2023. New local AI music generation model produces “first draft” for composers in one minute.

Asian Scientist. October 2023. Tech and materials science come to the fore at Singapore's 2023 President's Science and Technology Awards.

Tech Times. 26 November 2019. Graph convolutional networks are bringing emotion recognition closer to machines.

KDnuggets. June 2018. Detecting sarcasm with deep convolutional neural networks.

Datanami. 21 September 2017. Deep learning reveals new insights about people.

Opinion

The Business Times. 3 October 2025. Building the next chapter of scientific competitiveness. Authored commentary.

Independent video demonstrations

Mustango. The Sound of AI · Fahd Mirza

Tango. WorldofAI

Publications

Journal Articles

2026

- J1 LLM Alignment should go beyond Harmlessness–Helpfulness and incorporate Human Agency.
U Naseem, T Chakraborty, KW Chang, M Dras, P Nakov, N Peng, **S Poria**. **Cognitive Computation**, 2026.

2025

- J2 Action-guided prompt tuning for video grounding.
J Wang, R Tsao, X Wang, X Wang, F Feng, S Tian, **S Poria**. *Information Fusion*, 2025.
- J3 MM-InstructEval: Zero-shot evaluation of (Multimodal) Large Language Models on multimodal reasoning tasks.
X Yang, W Wu, S Feng, M Wang, D Wang, Y Li, Q Sun, Y Zhang, X Fu, **S Poria**. *Information Fusion*, 2025.
- J4 Toward robust multimodal sentiment analysis using multimodal foundational models.
X Zhao, **S Poria**, X Li, Y Chen, B Tang. *Expert Systems with Applications*, 2025.

2024

- J5 Hate speech detection: A comprehensive review of recent works.
A Gandhi, P Ahir, K Adhvaryu, P Shah, R Lohiya, E Cambria, **S Poria**, A Hussain. *Expert Systems*, 2024.
- J6 Video2music: Suitable music generation from videos using an affective multimodal transformer model.
J Kang, **S Poria**, D Herremans. *Expert Systems with Applications*, 2024.

2023

- J7 A Review of Deep Learning Techniques for Speech Processing.
A Mehrish, N Majumder, R Bhardwaj, R Mihalcea, **S Poria**. *Information Fusion*, 2023.
- J8 Dialogue relation extraction with document-level heterogeneous graph attention networks.
H Chen, P Hong, W Han, N Majumder, **S Poria**. *Cognitive Computation*, 2023.
- J9 Multimodal sentiment analysis: A systematic review of history, datasets, multimodal fusion methods, applications, challenges and future directions.
A Gandhi, K Adhvaryu, **S Poria**, E Cambria, A Hussain. *Information Fusion*, 2023.
- J10 WikiDes: A Wikipedia-based dataset for generating short descriptions from paragraphs.
HT Ta, ABS Rahman, N Majumder, A Hussain, L Najjar, N Howard, **S Poria**, A Gelbukh. *Information Fusion*, 2023.

2022

- J11 Exemplars-guided empathetic response generation controlled by the elements of human communication.
N Majumder, D Ghosal, D Hazarika, A Gelbukh, R Mihalcea, **S Poria**. *IEEE Access*, 2022.
- J12 Improving aspect-level sentiment analysis with aspect extraction.
N Majumder, R Bhardwaj, **S Poria**, A Gelbukh, A Hussain. *Neural Computing and Applications*, 2022.
- J13 Improving zero-shot learning baselines with commonsense knowledge.
A Roy, D Ghosal, E Cambria, N Majumder, R Mihalcea, **S Poria**. *Cognitive Computation*, 2022.
- J14 Multimodal Research in Vision and Language: A Review of Current and Emerging Trends.
S Uppal, S Bhagat, D Hazarika, N Majumdar, **S Poria**, R Zimmermann, A Zadeh. *Information Fusion*, 2022.
- J15 Towards solving NLP tasks with optimal transport loss.
R Bhardwaj, T Vaidya, **S Poria**. *Journal of King Saud University-Computer and Information Sciences*, 2022.

2021

- J16 Affect recognition for multimodal natural language processing.
S Poria, OY Soon, B Liu, L Bing. *Cognitive Computation*, 2021.
- J17 Deep neural approaches to relation triplets extraction: a comprehensive survey.
T Nayak, N Majumder, P Goyal, **S Poria**. *Cognitive Computation*, 2021.
- J18 Discriminative dictionary design for action classification in still images and videos.
A Roy, B Banerjee, A Hussain, **S Poria**. *Cognitive Computation*, 2021.
- J19 Information fusion for affective computing and sentiment analysis.
A Hussain, E Cambria, **S Poria**, A Hawalah, F Herrera. *Information Fusion*, 2021.
- J20 Investigating gender bias in BERT.
R Bhardwaj, N Majumder, **S Poria**. *Cognitive Computation*, 2021.
- J21 Persuasive dialogue understanding: The baselines and negative results.
H Chen, D Ghosal, N Majumder, A Hussain, **S Poria**. *Neurocomputing*, 2021.
- J22 Phonetic-enriched text representation for Chinese sentiment analysis with reinforcement learning.
H Peng, Y Ma, **S Poria**, Y Li, E Cambria. *Information Fusion*, 2021.
- J23 Recognizing emotion cause in conversations.
S Poria, N Majumder, D Hazarika, D Ghosal, R Bhardwaj, SYB Jian, P Hong, R Ghosh, A Roy, N Chhaya, A Gelbukh, R Mihalcea. *Cognitive Computation*, 2021.

2020

- J24 Anaphora and coreference resolution: A review.
R Sukthanker, **S Poria**, E Cambria, R Thirunavukarasu. **Information Fusion**, 2020.
- J25 Beneath the tip of the iceberg: Current challenges and new directions in sentiment analysis research.
S Poria, D Hazarika, N Majumder, R Mihalcea. **IEEE Transactions on Affective Computing**, 2020.
- J26 Conversational Transfer Learning for Emotion Recognition.
D Hazarika, **S Poria**, R Zimmermann, R Mihalcea. **Information Fusion**, 2020.
- J27 Dialogue systems with audio context.
T Young, V Pandealea, **S Poria**, E Cambria. **Neurocomputing**, 2020.
- J28 Social media marketing and financial forecasting.
F Xing, **S Poria**, E Cambria, R Welsch. **Information Processing & Management**, 2020.

2019

- J29 Computational intelligence for affective computing and sentiment analysis [guest editorial].
Cambria, Erik, **Soujanya Poria**, Amir Hussain, and Bing Liu. **IEEE Computational Intelligence Magazine**. (2019).
- J30 Emotion Recognition in Conversation: Research Challenges, Datasets, and Recent Advances.
S Poria, N Majumder, R Mihalcea, E Hovy. **IEEE Access**, 2019.
- J31 Sentiment and Sarcasm Classification with Multitask Learning.
N Majumder, **S Poria**, H Peng, N Chhaya, E Cambria, A Gelbukh. **IEEE Intelligent Systems**, 2019.
- J32 The Nitty-GRITties of Success: Computational Analysis of Grit From Language.
T Maheshwari, A Reganti, **S Poria**, R Mihalcea. **IEEE Access**, 2019.

2018

- J33 Multimodal sentiment analysis using hierarchical fusion with context modeling.
N Majumder, D Hazarika, A Gelbukh, E Cambria, **S Poria**. **Knowledge-Based Systems**, 2018.
- J34 Multimodal Sentiment Analysis: Addressing Key Issues and Setting Up the Baselines.
S Poria, N Majumder, D Hazarika, E Cambria, A Gelbukh, A Hussain. **IEEE Intelligent Systems**, 2018.
- J35 OntoSenticNet: A commonsense ontology for sentiment analysis.
M Dragoni, **S Poria**, E Cambria. **IEEE Intelligent Systems**, 2018.
- J36 Recent trends in deep learning based natural language processing.
T Young, D Hazarika, **S Poria**, E Cambria. **IEEE Computational Intelligence Magazine**, 2018.
- J37 Sentiment analysis is a big suitcase.
E Cambria, **S Poria**, A Gelbukh, M Thelwall. **IEEE Intelligent Systems**, 2018.

2017

- J38 A review of affective computing: From unimodal analysis to multimodal fusion.
S Poria, E Cambria, R Bajpai, A Hussain. **Information Fusion**, 2017.
- J39 Deep learning-based document modeling for personality detection from text.
N Majumder, **S Poria**, A Gelbukh, E Cambria. **IEEE Intelligent Systems**, 2017.
- J40 Ensemble application of convolutional neural networks and multiple kernel learning for multimodal sentiment analysis.
S Poria, H Peng, A Hussain, N Howard, E Cambria. **Neurocomputing**, 2017.

2016

- J41 Aspect extraction for opinion mining with a deep convolutional neural network.
S Poria, E Cambria, A Gelbukh. **Knowledge-Based Systems**, 2016.
- J42 Fusing audio, visual and textual clues for sentiment analysis from multimodal content.
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